Request — Paul Schulwitz
134427

Access DB# _____

SEARCH REQUEST FORM

OCT - 5 2004

Scientific and Technical Information Center

Requester's Full Name: Sabiha Qazi Examiner #: 74141 Date: 10/5/04

Art Unit: 1616 Phone Number 30 20622 Serial Number: 10/781,120

Mail Box and Bldg/Room Location: 4C70 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

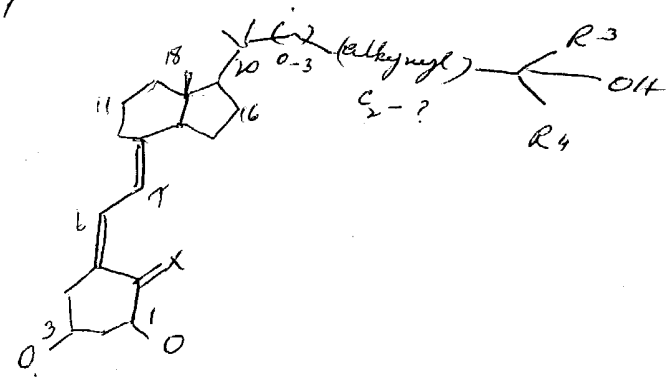
Title of Invention: 1,3-Dihydroxy-20,20 Dialkyl Vit D Analogs

Inventors (please provide full names): MERCHAND, Percy S.

Earliest Priority Filing Date: 9/8/1997

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for the Compds of For. (I) (broad) & method of use.



Please see attached Sheet

Thank you

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STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: _____	NA Sequence (#)_____	STN _____
Searcher Phone #: _____	AA Sequence (#)_____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____
Date Completed: _____	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify)_____

PTO-1590 (8-01)

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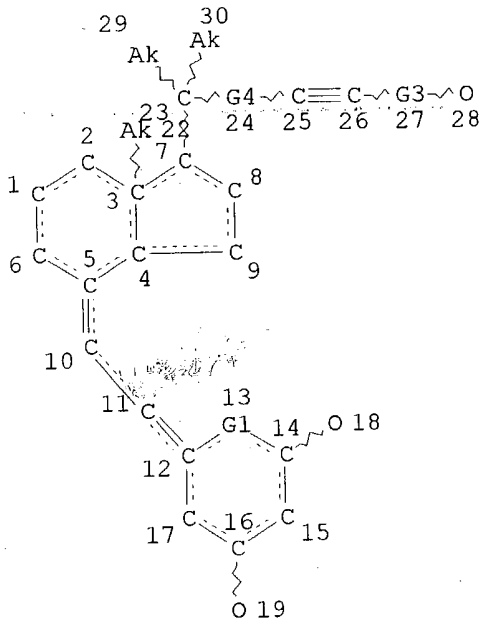
L7 STR



C≡CH2
@20 21

Ak~C~Ak
31 @32 33

C @43

F~Ak~C~Ak
34 35 @36 37

F~Ak~C~Ak~F
38 39 @40 41 42

VAR G1=CH2/20
VAR G3=32/36/40/43
REP G4=(0-3) C
NODE ATTRIBUTES:
NSPEC IS R AT 43
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 43

STEREO ATTRIBUTES: NONE
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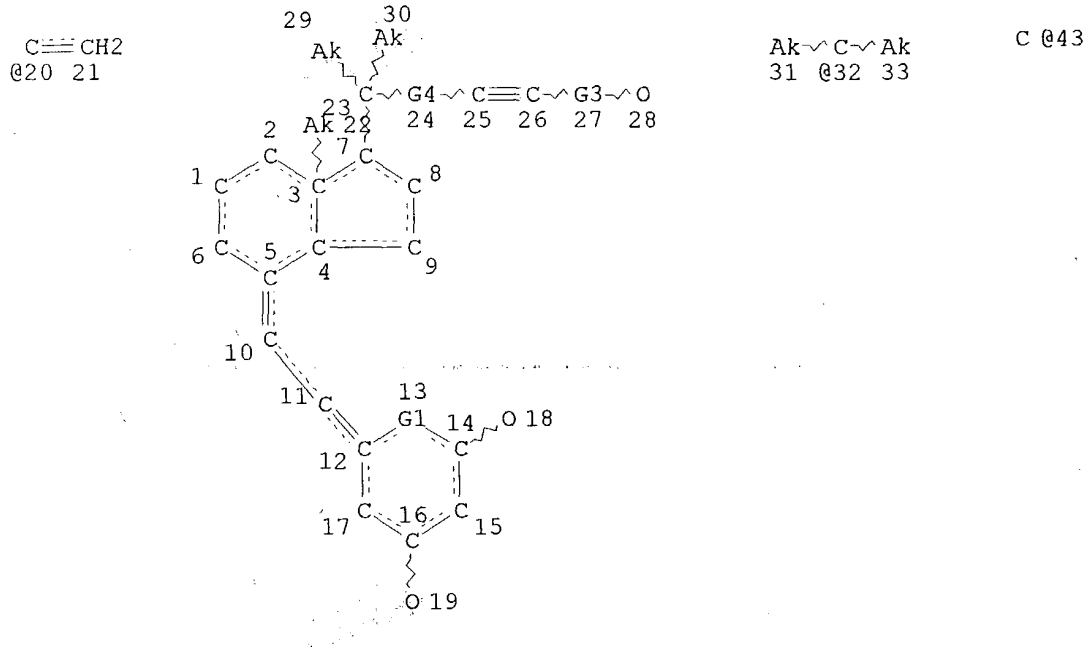
L7 STR



VAR G1=CH2/20
VAR G3=32/36/40/43
REP G4=(0-3) C
NODE ATTRIBUTES:
NSPEC IS R AT 43
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 43

STEREO ATTRIBUTES: NONE
L11 5 SEA FILE=MARPAT SSS FUL L7
L12 2 SEA FILE=MARPAT ABB=ON PLU=ON L11/COM

=> d l12 ibib abs qhit 1-2

L12 ANSWER 1 OF 2 MARPAT COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 140:391401 MARPAT
TITLE: Preparation of vitamin D analogs as potential phosphate binders, steroids, or anti-proliferative agents

INVENTOR(S): Binderup, Ernst Torndal; Hansen, Kai Holst; Bretting, Claus Aage Svensgaard; Calverley, Martin John
PATENT ASSIGNEE(S): Leo Pharma A/S, Den.
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004037781	A1	20040506	WO 2003-DK718	20031023

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

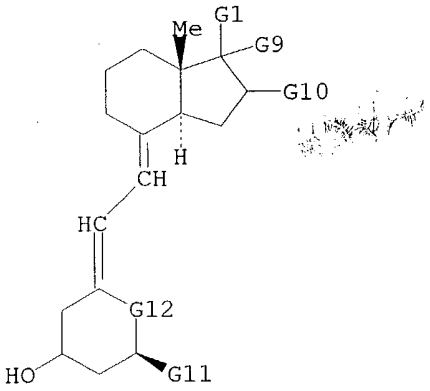
PRIORITY APPLN. INFO: DK 2002-1608 20021023
US 2002-420783P 20021024

GI

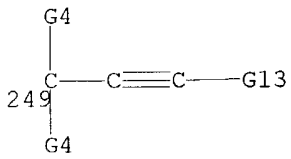
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Vitamin D analogs I (R1 and R2 = halogen, (C1-C6)hydrocarbyl, optionally substituted with one or two hydroxyl group on one or more fluorine atoms, or, together with the carbon atom to which they are both attached, R1 and R2 form a (C3-C6)carbocyclic ring, or one of R1 and R2 taken together with R3 forms a direct bond, such that a triple bond is constituted, or R1 and R2 represent both hydrogen; R3 = a direct bond with one of R1 and R2, hydrogen or (C1-C3)hydrocarbyl; X = (E)-ethylene, (Z)-ethylene, ethynylene, or a bond; Y and Z independently = H or Me; A = OH, F or H; B = CH2 or H2) were prepared as potential phosphate binders, steroids, parathyroid hormone secretion inhibitors, or anti-proliferative agents. Thus, to a solution of II (R = SiMe2CMe3) was reacted with isopropyltriphenylphosphonium iodide to give the corresponding alkene product. The above alkene was treated with anthracene in DCM and irradiated with A TQ718Z2 UV lamp for 35 min to give III (R = SiMe2CMe3) which was treated with tetra-n-butylammonium fluoride trihydrate in THF to give I (A = OH, B = CH2, X = (E)-ethylene, Y = H, Z = Me, R1, R2 = Me, R3 = H).

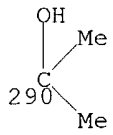
MSTR 1



G1 = 249



G4 = Me
G11 = OH
G12 = CH2
G13 = 290



MPL: claim 1

L12 ANSWER 2 OF 2 MARPAT COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 130:25229 MARPAT

TITLE: synthesis and activity of 3-epi vitamin D3 compounds for use in treatment of disorders involving aberrant activity of hyperproliferative skin, parathyroid, and bone cells

INVENTOR(S): Reddy, Satayanarayana G.

PATENT ASSIGNEE(S): F. Hoffmann-La Roche Ag, Switz.; Women and Infant's Hospital

SOURCE: PCT Int. Appl., 98 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851663	A2	19981119	WO 1998-US10221	19980515
WO 9851663	A3	19990204		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9874977	A1	19981208	AU 1998-74977	19980515
US 2001007907	A1	20010712	US 1998-80026	19980515
US 2003171605	A1	20030911	US 2002-238911	20020909
PRIORITY APPLN. INFO.:			US 1997-46643P	19970516
			US 1998-80026	19980515
			WO 1998-US10221	19980515

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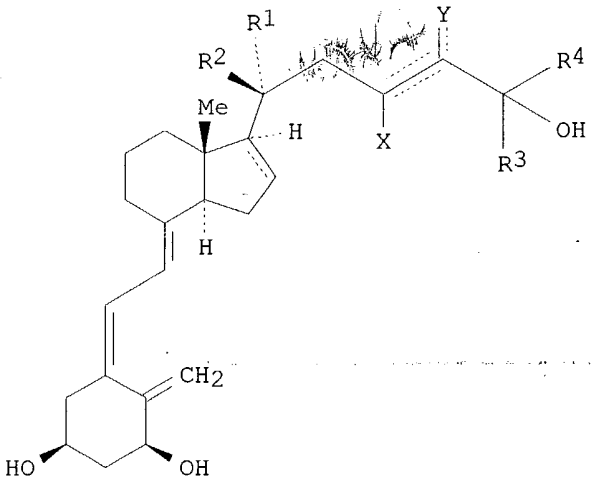

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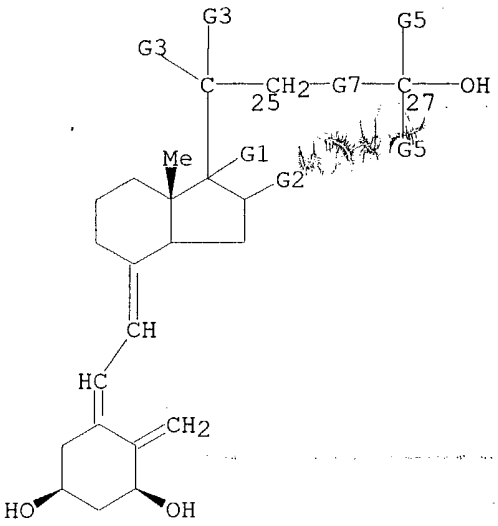
AB Syntheses of novel 3-epi vitamin D3 compds. (I) [R1, R2 independently = H, alkyl; R3, R4 independently = H, alkyl, hydroxyalkyl, haloalkyl; X = H, OH; Y = H, OH, O] are described. I were first identified as metabolites produced via a novel tissue-specific metabolic pathway which catalyzes the 3-β-hydroxy epimerization of vitamin D3 compds. Isolated 3-epimer forms of vitamin D3 compds. have been characterized and shown to have improved biol. properties compared to their isomeric counterparts, such as reduced hypercalcemic activity and enhanced stability in vivo. The vitamin D3 compds. of the present invention can be used as substitutes for natural and synthetic vitamin D3 compds.

MSTR 1



G3 = Me
G5 = Me
G7 = ethynylene
MPL: claim 1
NTE: substitution is restricted